

**Appl. No.** : 10/748,729  
**Filed** : December 29, 2003  
**Docket** : EXCEL.016REC1

REMARKS

By this paper, Applicant has cancelled Claims 1-17, 25 and 40 without prejudice, amended Claims 18, 19, 20, 26, 29, 31, 32, 36 and 39 and has added new Claims 41-48. Hence, Claims 18-24, 26-39 and 41-48 are now pending in the application.

*Objections under 37 CFR 1.172(a)*

In response to Par. 1 of the Office Action, Applicant has herein submitted a Written Consent by Assignee for Reissue in compliance with 37 CFR 1.172.

In response to Par. 2 of the Office Action, Applicant hereby submits a new Establishment of Right of Assignee to Take Action and Revocation and Power of Attorney executed by Alan Benjamin, President of Excelsus Technologies, Inc., including (i) a complete chain of title establishing ownership of U.S. Patent No. 6,212,259 and the present reissue continuation application, and (ii) a statement indicating that Mr. Benjamin is empowered and authorized to act on behalf of Excelsus Technologies Inc., the current assignee.

Applicant submits that these documents overcome all of the Examiner's objections in this regard.

*Objections under 37 CFR 1.175(a)(1) and(b)(1)*

In response to Pars. 3, 4 and 5 of the Office Action, Applicant herewith resubmits (i) the Reissue Application Supplemental Declaration by Inventor, and (ii) Reissue Application Supplemental Declaration by the Assignee, both previously filed Sept. 11, 2003, containing both the statement required under 37 CFR 1.175(a)(1) as to applicant's belief that the original patent is wholly or partly inoperative or invalid, and a description of the error(s) that are the basis for the reissue. Furthermore, this Supplemental Declaration states that these errors arose without any deceptive intent on the part of the Applicant. Specifically, the Examiner's attention is directed to the highlighted portions of the Reissue Application Supplemental Declaration by Inventor. Applicant believes these previously submitted documents completely satisfy all requirements set forth in 37 CFR 1.175(a)(1) and(b)(1), and therefore overcome the stated objections.

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*Surrender of Patent*

Pursuant to Par. 6 of the Office Action, Applicant herein includes a Written Consent by Assignee for Reissue document, which includes a statement by Assignee that it surrenders U.S. Patent No. 6,212,259 upon which the present reissue application is based. Applicant also includes herewith for surrender the original patent grant for U.S. 6,212,259.

*Amendments to the Specification*

Pursuant to Par. 7.C/ of the Office Action, Applicant has herein presented the prior amendments to the specification in the form specified by the Examiner. Applicant submits that the new text presented herein is fully in compliance with the requirements of 37 C.F.R. 1.173, and adds no new matter, and therefore overcomes the Examiner's objections.

*Amendments to the Claims*

Pursuant to Pars. 7.A/ and B/ of the Office Action, Applicant has herein presented the amendments to the Claims in the form specified by the Examiner. Applicant submits that the claims as presented above herein is fully in compliance with the requirements of 37 C.F.R. 1.173, and therefore overcomes the Examiner's objections. While Applicant has included the full text of original (issued) patent Claims 1-17 within brackets as explicitly requested by the Examiner, Applicant respectfully notes that this appears to be a misinterpretation of 37 C.F.R. 1.173 (Nov. 22, 2004 Revision), the relevant portion reproduced below:

*"2) Claims. An amendment paper must include the entire text of each claim being changed by such amendment paper and of each claim being added by such amendment paper. For any claim changed by the amendment paper, a parenthetical expression "amended," "twice amended," etc., should follow the claim number. Each changed patent claim and each added claim must include markings pursuant to paragraph (d) of this section, except that a patent claim or added claim should be canceled by a statement canceling the claim without presentation of the text of the claim." {Emphasis added}*

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The foregoing passage indicates that cancellation of patent claims should be cancelled by a statement canceling the claim, and not by presenting the entire text of the claim.

For the Examiner's convenience, Applicant has further provided below a "redlined" set of claims clearly showing all amendments to the claims relative to the prior (preliminary) amendment submitted by Applicant dated December 29, 2003, including relevant status identifiers.

Applicant has accordingly herein made all possible good faith efforts to comply with the statute and the explicit instructions of the Examiner in presentation of its amendments.

*Provisional Double Patenting Rejections*

Applicant herein respectfully traverses the Examiner's provisional double patenting rejections with respect to co-owned and commonly invented (i.e., same "inventive entity") U.S. Application Serial Nos. 10/408,030 and 10/355,897 as cited by the Examiner in Par. 8 of the Office Action.

Specifically, Applicant traverses the Examiner's assertions that the subject matter claimed in the instant application (i) is disclosed in 10/355,897, and (ii) would be covered by any patent granted on one of these co-pending applications.

(i) Application No. 10/355,897 is a reissue application of a patent (6,181,777, filed as 09/370,137), which was a continuation in part (CIP) of U.S. 09/195,552 (now U.S. 6,188,750). The present application (10/748,729) is a reissue (continuation) of U.S. 6,212,259, which is a CIP of 09/370,137 filed on Aug. 9, 1999, which is, in turn, a continuation-in-part application based on application Ser. No. 09/195,522. Hence, the subject matter at issue in the instant application was no where present in U.S. 10/355,897; rather, the subject matter of the instant invention was added as part of the CIP filing. Hence, there is plain reason why the claims of the instant application could not be presented in 10/355,897 (or its corresponding 09/370,137); i.e., the subject matter of the present invention was not present in the specification of that prior application, and hence could not be claimed. See especially Figs. 15, 17 and 18 of the instant application (which are not present in the 09/370,137 or 10/355,897 applications).

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Accordingly, Applicant submits that the Examiner's provisional patent rejection is *per se* erroneous.

(ii) As amended herein, Applicant's independent claims in the instant application are directed to two primary areas: (a) a telecommunications circuit having, *inter alia*, first through fourth stages, the fourth stage being specifically adapted to reduce return loss, and a suppression circuit (see, e.g., Claim 18); and (b) a telecommunications circuit having, *inter alia*, a capacitor and switch in series, and a suppression circuit adapted to suppress transients resulting at least in part from actuation of the switch (see, e.g., Claim 39).

In contrast, Applicant's claims as set forth in U.S. 10/408,030 (the parent hereto) are directed to (a) a filter circuit having, *inter alia*, a first switch and capacitor, and a second switch and second capacitor (see, e.g., Claim 18); (b) a filter circuit having, *inter alia*, first through fourth inductors, a transistor switch and first and second correction circuits (see, e.g., Claim 31); and so forth.

Applicant respectfully submits that the subject matter claimed in the instant application is therefore not a variant of the subject matter claimed in 10/408,030, but rather a separate invention. The foregoing underscored elements, in combination with the other elements of their respective claims, are particularly directed to distinct aspects of Applicant's invention. For example, the embodiment of Fig. 15 (including its suppression circuit 74) is specifically included to address the problem of switching transients. This is a distinct feature from the four-stage construction having a fourth stage adapted to reduce return loss, which is a distinct feature from a circuit having two sets of series switches and capacitors. Each claim presented in the two applications (i.e., the instant application and 10/408,030) present a distinct circuit which is fundamentally different from the others.

Hence, in sum, Applicant submits that (i) 10/355,897 is not properly a basis for a provisional double patenting rejection, and (ii) 10/408,030 defines inventions that are distinct with respect to the present application.

Applicant therefore respectfully request withdrawal of the provisional double patenting rejections.

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*Objections, and Rejections under 35 U.S.C. Section 112*

By this paper, Applicant has cancelled Claim 25, thereby rendering the Examiner's rejections and objections of Pars. 9 and 10 of the Office Action moot.

*Rejections under 35 U.S.C. Section 102 and 103*

**Claims 36 and 39** - In response to the Examiner's rejection of independent Claim 36 under Section 102(b) over Gupta (U.S. 5,025,443), Applicant first notes that Claim 36 as previously presented included limitations relating to a switch. By the Examiner's own admission, Gupta does not teach a capacitor and switch (see, e.g., discussion of Claim 18 on page 8 of the Office Action {"...it should be noticed..."}). Hence, Applicant submits that Claim 36 as previously presented is not properly rejected under 35 U.S.C. 102, since all elements recited in the claim are not taught or inherent in a single reference.

Despite the foregoing, Applicant has herein amended Claim 36 to yet further distinguish over the art of record, including limitations relating to the recited suppression circuit being adapted to suppress voltage transients occurring within the filter circuit as the result of actuation of said switch during at least one of an on-hook to off-hook, or off-hook to on-hook, transient. Applicant respectfully submits that since Gupta in no way teaches or suggests a switch, it cannot reasonably be relied upon to teach or suggest suppression of transients created by actuation of said switch. Phrased differently, a reference cannot be relied upon to teach an effect resulting from operation of a component nowhere taught in that reference.

Similarly, Applicant can find no mention of suppression of transients resulting from actuation of the switch described in Williamson, et al (U.S. 6,477,249). Hence, since neither Gupta nor Williamson teach or fairly suggest such functionality, the combination of these references cannot as a matter of law be used to render Applicant's amended Claim 36 obvious.

Since Claims 37 and 38 depend on Claim 36, these claims cannot be considered anticipated or obvious either.

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Similarly, Claim 39 has been amended to include limitations relating to switch actuation as discussed above.

**Claim 29** – Claim 29 has been amended herein to include limitations relating to a suppression circuit. For reasons similar to those discussed with respect to Claim 36 above, Applicant submits that Claim 29 as amended is non-obvious over Gupta and Williamson, and hence in condition for allowance.

**Claim 18** – By this paper Applicant has amended Claim 18 to include limitations relating to the presence of a fourth filter stage specifically adapted to reduce return loss. Applicant notes that while Gupta is cognizant of the need to address return loss (per Col. 18, lines 45-55 as cited by the Examiner), Gupta in no way teaches or suggests any specific structure (other than the circuit as a whole) to do so. Gupta merely states:

*“The return loss, which is a measure of the imperfection in the impedance termination, is a function of frequency. At the low and high frequencies, singing return loss must not be greater than 10 db at the mid-frequencies and echo return loss must not be greater than 18 db. Computer optimization, together with the constraint of practical component values, have gone into generating the values of the components described above. These component values result in singing return losses at low and high frequencies, to exceed 20 db, while echo return loss exceeds 26 db.”*

Hence, Gupta merely teaches using a computer optimization process to select the values of the circuit of Fig. 11 as a whole (i.e., considered in light of one another and operating as a whole) to produce desired return loss characteristics. No teaching of a particular stage or portion of the circuit specifically adapted to address return loss is present.

Contrast this with Applicant's invention recited in Claim 18, wherein a fourth stage is particularly added and configured to address return loss.

Regarding Claim 19, the difference between Gupta and Applicant's invention becomes yet clearer, wherein the placement of the aforementioned fourth stage within the circuit is described, such placement being specifically chosen to provide the desired characteristics, such

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placement being different than that taught by Gupta (i.e., any of the circuits within the metallic LPF 710 of Gupta) are separated from the output terminals by inductors L5A and L5B.

Regarding Claim 20, Applicant respectfully submits that the Examiner takes much creative license in calling R1/R2/T1/C12 of Gupta a “tank circuit”. As is well known, a tank circuit comprises an inductive element in electrical parallel with a capacitive element (and optionally a resistive element). See, e.g., as one of many such references:

*“The tank circuit, a common building block in electronic systems, is a parallel resonant circuit comprised of an inductor, a capacitor, and an optional resistor.”*  
{Emphasis added} <http://www.rfmd.com/databooks/db97/an0003.pdf>

The aforesaid elements of Fig. 11 of Gupta appear to Applicant to (i) be primarily in a series relationship (see C12 in series with both secondary coils of transformer T1), and (ii) coupled only via inductive rather than electrical means (i.e., R1 and R2 are not in the same electrical circuit or electron pathway as C12 and the secondary coils of T1). Applicant therefore submits that Gupta does not teach a tank circuit comprising the aforesaid elements.

#### *Summary*

Based on the foregoing, Applicant submits that all pending claims are in condition for allowance, and all objections have been overcome. Applicant respectfully requests that the Examiner pass this case to issuance at the earliest opportunity.

#### *Other Remarks*

Applicant hereby specifically reserves the right to prosecute claims of different scope in another continuation or divisional application.

Applicant notes that any cancellations or additions made herein are made solely for the purposes of more clearly and particularly describing and claiming the invention, and not for purposes of overcoming art or for patentability. The Examiner should infer no (i) adoption of a position with respect to patentability, (ii) change or narrowing in the Applicant’s position with respect to any claim or subject matter of the invention, or (iii) acquiescence in any way to any position taken by the Examiner, based on such cancellations or additions.

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If the Examiner has any questions or comments which may be resolved over the telephone, he is requested to call the undersigned at (858) 675-1670.

Respectfully submitted,

GAZDZINSKI & ASSOCIATES

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By: 

Robert F. Gazdzinski  
Registration No. 39,990  
11440 West Bernardo Court, Suite 375  
San Diego, CA 92127  
(858) 675-1670  
(858) 675-1674 (fax)



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## APPENDIX I – REDLINED CLAIMS



1.-17. (Cancelled)

18. (Currently amended) A telecommunication impedance blocking filter circuit, comprising:  
at least one input terminal;  
at least one output terminal;  
a first filter stage disposed in electrical series between said at least one input and output terminals;  
a second filter stage disposed in electrical series with said first filter stage, said second stage comprising a capacitor and switch disposed in series with at least one another; ~~and~~  
a third filter stage disposed in electrical series with said second filter stage; and  
a fourth filter stage disposed in electrical series with said third filter stage, said fourth stage being specifically adapted to reduce return loss;

wherein at least one of said first through fourth stages comprises a suppression circuit.

19. (Currently amended) The filter circuit of Claim 18, ~~further comprising a~~ wherein said fourth filter stage is disposed in electrical series between said at least one output terminal and the rest of said first, second and third filter stages within said circuit with said third filter stage, said fourth stage being adapted to reduce return loss.

20. (Currently amended) The filter circuit of Claim 19, wherein said fourth stage comprises at least one ~~R-L-C~~ tank circuit having at least one inductive element and at least one capacitive element disposed in electrical parallel with one another.

21. (Previously Presented) The filter circuit of Claim 18, wherein said switch is actuated in response to at least DC loop current.

22. (Previously Presented) The filter circuit of Claim 21, wherein said at least DC loop current is generated in response to an off-hook transient.

23. (Previously Presented) The filter circuit of Claim 18, wherein said switch comprises a reed switch.

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24. (Previously Presented) The filter circuit of Claim 18, further comprising a second switch disposed within one of said first, second or third filter stages.

25. (Cancelled)

26. (Currently amended) The filter circuit of Claim 18, ~~further comprising a~~ wherein said suppression circuit is disposed in electrical series with said first, second, and third filter stages.

27. (Previously Presented) The filter circuit of Claim 26, wherein said suppression circuit comprises at least one capacitor adapted to attenuate any voltage spikes that are generated due to on-hook or off-hook transients.

28. (Previously Presented) The filter circuit of Claim 18, further comprising a suppression circuit disposed within one of said first, second, and third filter stages.

29. (Currently amended) A telecommunications filter circuit, comprising:  
first and second input terminals;  
first and second output terminals;  
at least first and second inductors disposed in electrical series between said first input and first output terminals;  
at least third and fourth inductors disposed in electrical series between said second input and second output terminals; ~~and~~  
at least one switch inductively coupled to at least one of said first and third inductors, said switch disposed in electrical series with at least one capacitor between first and second common points, said common points being in electrical series with said first and second output terminals, respectively; and  
a suppression circuit coupled between said common points and said input terminals, said suppression circuit being adapted to at least mitigate voltage transients generated through actuation of said at least one switch due to connected equipment transients from being fed back to said input terminals.

30. (Previously Presented) The filter circuit of Claim 29, further comprising fifth and sixth inductors disposed in electrical series with said first and second inductors, and third and fourth inductors, respectively, said fifth and sixth inductors being adapted to reduce return loss.

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31. (Currently amended) The filter circuit of Claim 30, wherein said fifth and sixth inductors are part of respective ones of R-L-C tank circuits ~~each having at least one capacitor in electrical parallel with respective ones of said fifth and sixth inductors.~~

32. (Currently amended) The filter circuit of Claim ~~29~~ 31, wherein said at least one switch is actuated in response to at least DC loop current.

33. (Previously Presented) The filter circuit of Claim 32, wherein said at least DC loop current is generated in response to an off-hook transient.

34. (Previously Presented) The filter circuit of Claim 29, further comprising at least one second switch disposed in electrical parallel with said at least one switch and said at least one capacitor.

35. (Previously Presented) The filter circuit of Claim 29, wherein said at least first and third inductors are disposed within respective ones of tank circuits, said tank circuits being disposed in electrical series with said first and second inductors, and said third and fourth inductors, respectively.

36. (Currently amended) A telecommunication impedance blocking filter circuit, comprising:

at least one input terminal;

at least one output terminal;

a first filter stage disposed in electrical series between said at least one input and output terminals;

a second filter stage disposed in electrical series with said first filter stage, said second stage comprising a capacitor and switch disposed in series with at least one another; and

a suppression circuit disposed in electrical series with said first and second filter stages, said suppression circuit being adapted to suppress voltage transients occurring within said filter circuit as the result of actuation of said switch during at least one of an on-hook to off-hook, or off-hook to on-hook, transient.

37. (Previously Presented) The filter circuit of Claim 36, further comprising a third filter stage having at least first and second tank circuits.

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38. (Previously Presented) The filter circuit of Claim 36, wherein one of said first and second filter stages comprises at least first and second tank circuits.

39. (Currently amended) A telecommunications circuit comprising:  
first and second circuit paths disposed substantially in electrical parallel to one another between respective sets of inputs and output terminals, said first and second circuit paths each comprising a plurality of inductive elements;

a capacitor and switch disposed in series with at least one another, said capacitor and switch being disposed electrically between said first and second circuit paths; and

a suppression circuit disposed electrically between said first and second circuit paths, said suppression circuit being adapted to suppress voltage transients occurring within said filter circuit as the result of actuation of said switch during at least one of an on-hook to off-hook, or off-hook to on-hook, transient.

40. (Cancelled)

41. (New) A telecommunication impedance blocking filter circuit, comprising:  
at least one input terminal;  
at least one output terminal;  
a first filter stage disposed in electrical series between said at least one input and output terminals;

a second filter stage disposed in electrical series with said first filter stage, said second stage comprising a capacitor and switch disposed in series with at least one another; and

a suppression circuit disposed electrically between said at least one input terminal and said second filter stage, said suppression circuit being adapted to at least mitigate voltage transients generated through actuation of said switch from being fed back to said at least one input terminal.

42. (New) The filter circuit of Claim 41, wherein said circuit is coupled to at least one telecommunications device via said at least one input terminal, and said mitigation of voltage transients prevents interruption of the operation of said at least one device.

43. (New) The filter circuit of Claim 42, wherein said at least one telecommunications device comprises an ADSL modem.

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44. (New) The filter circuit of Claim 41, further comprising a tank circuit having an inductive element and capacitive element disposed in electrical parallel with one another, said tank circuit being disposed electrically between said second filter stage and said at least one output terminal.

45. (New) The filter circuit of Claim 41, further comprising a third filter stage disposed in electrical series with said first and second filter stages, said fourth stage being adapted to reduce return loss.

46. (New) The filter circuit of Claim 44, further comprising a third filter stage disposed in electrical series with said first and second filter stages, said fourth stage being adapted to reduce return loss.

47. (New) A telecommunication impedance blocking filter circuit, comprising:  
a plurality of input terminals;  
a plurality of output terminals;  
a first filter stage disposed in electrical series between said at input and output terminals;  
a second filter stage disposed in electrical series with said first filter stage, said second stage comprising a capacitor and switch disposed in series with at least one another; and  
a suppression circuit disposed electrically between said first and second filter stages, said suppression circuit being adapted to at least mitigate voltage transients generated through actuation of said switch due to connected equipment transients from being fed back to said input terminals in order to mitigate the effect of said transients on external equipment connected to said input terminals.

48. (New) The filter circuit of Claim 47, further comprising a tank circuit stage having first and second tank circuits each having an inductive element and capacitive element disposed in electrical parallel with one another, said tank circuit stage being disposed electrically between said second filter stage and said output terminals.